

Theories of the Syllable

Expiratory Theory

Other names:

- chest-pulse theory
 - pressure theory
- by R.H. Stetson

- It is the oldest theory.
- Each syllable **corresponds to a single expiration.**
- A word contains as many syllables as there are such expirations made during its utterance.
- Each vowel sound is pronounced with a fresh expiration.
- The syllabic boundary is at the point where a fresh expiratory pulse begins.

Method of Investigation

It is easy to prove this theory with the help of the flame of a candle.

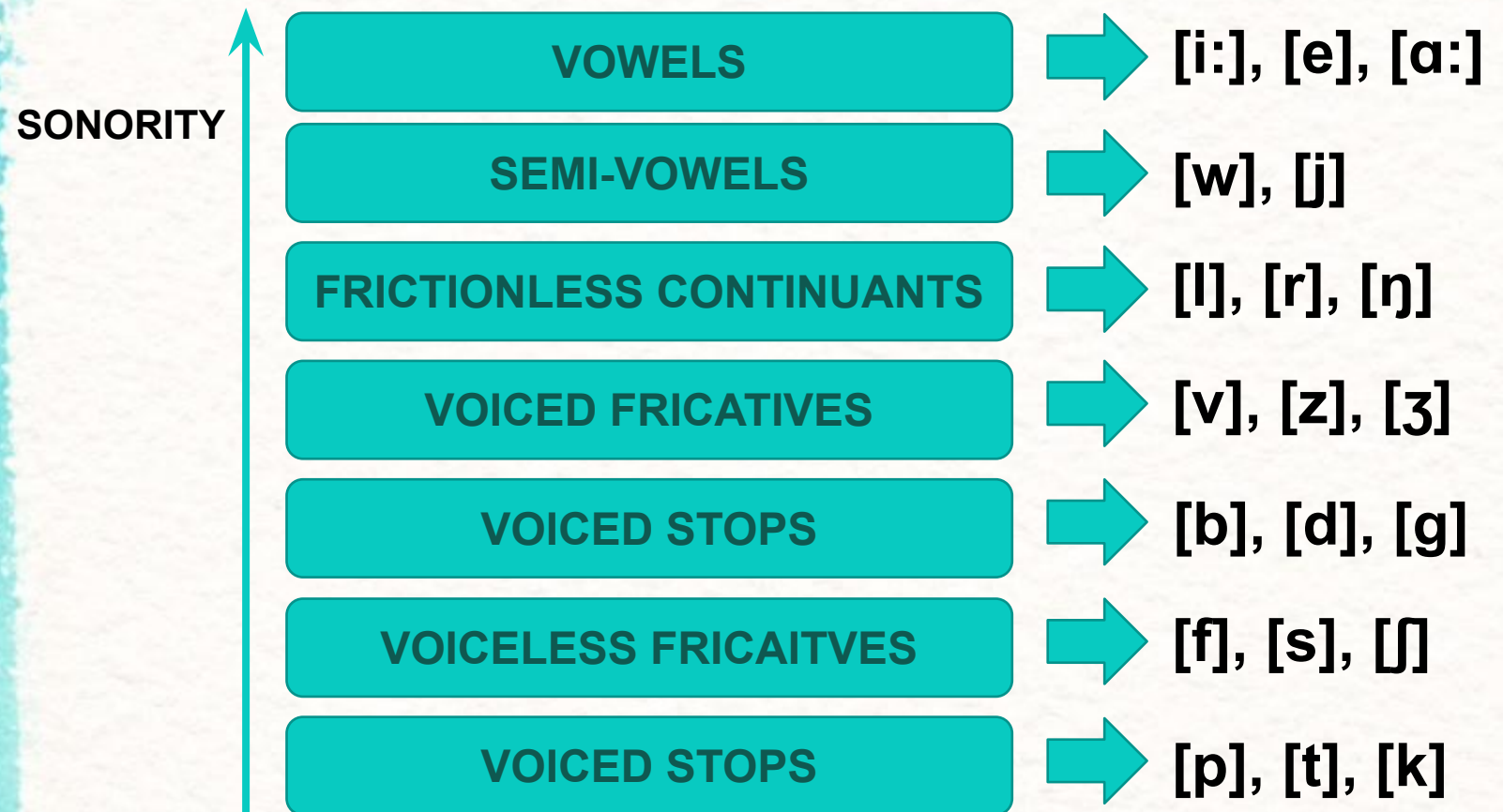


- Nevertheless, the theory is **criticized by a number of scientists** (e.g. G.P. Torsuyev, A.C. Gimson).
- [**si:ɪŋ**] – linguistically can be divided into **two units**, while there is only **one chest-pulse**.
- [**sta:**] – there are **two expiratory pulses**: the first is on the [**s**] and the second is on the [**ta:**] (which occurs due to the occlusion needed to articulate [**t**]), but the **word is still monosyllabic**.

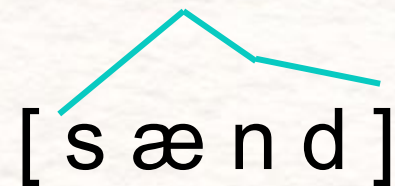
Sonority Theory

= prominence theory
by Otto Jespersen,
R.I. Avanesov

- **Sonority** – an acoustic property of speech sounds which determines this or that degree of their perceptibility.



- A syllable contains one "**peak**" of sonority separated from other peaks by "**valleys**" of lower sonority.
- [**sæ**d.n] – [**æ**] and [n] are the peaks separated by [d], which is less sonorous.
- [**sænd**] – there is only one peak ([**æ**]) and, hence, one syllable.



- The theory fails to explain the mechanism of the syllable formation and syllable division.
- [**`eks-trə**] or [**`ek-strə**] ?
- [**ə neim**] or [**ən eim**] ?
- The sonority theory can only explain why this sequence consists of two syllables, but it cannot explain **by what means** and **at what points** it is divided into syllables in two different ways.

Theory of Muscular Tension

by L.V. Shcherba,
A.V. Vasilyev

- Sounds in connected speech are pronounced with alternative intensification and slackening of muscular tension.
- Each peak of intensification with the following slackening of tension forms a syllable.
- Sounds that are pronounced with intensification of muscular tension are termed **pitch sounds**.
- The syllable is **an arc of articulatory tension**.
- The pitch sound is the **centre of the syllable** and of the arc of tension (vowel or sonorant).



Loudness Theory

by N.I. Zhinkin

- Shcherba's definition is modified:
- **The syllable is an arc of articulatory effort.**
- The arc of loudness of perception level is formed due to variations of the volume of the pharyngeal passage which is modified by contractions of its walls.
- The narrowing of the passage and the increase in muscular tension reinforce the actual loudness of a vowel, forming the peak of the syllable.

Conclusion

- All four theories consider the syllable as a **kind of an arc**.
- In case of **expiratory theory**, the peak of this arc is an **expiration**.
- In case of **sonority theory**, the peak is **the most sonorous sound**.
- In case of **tension theory**, the peak is a **pitch sound**.
- In case of **loudness theory**, the peak is **the loudest sound**.